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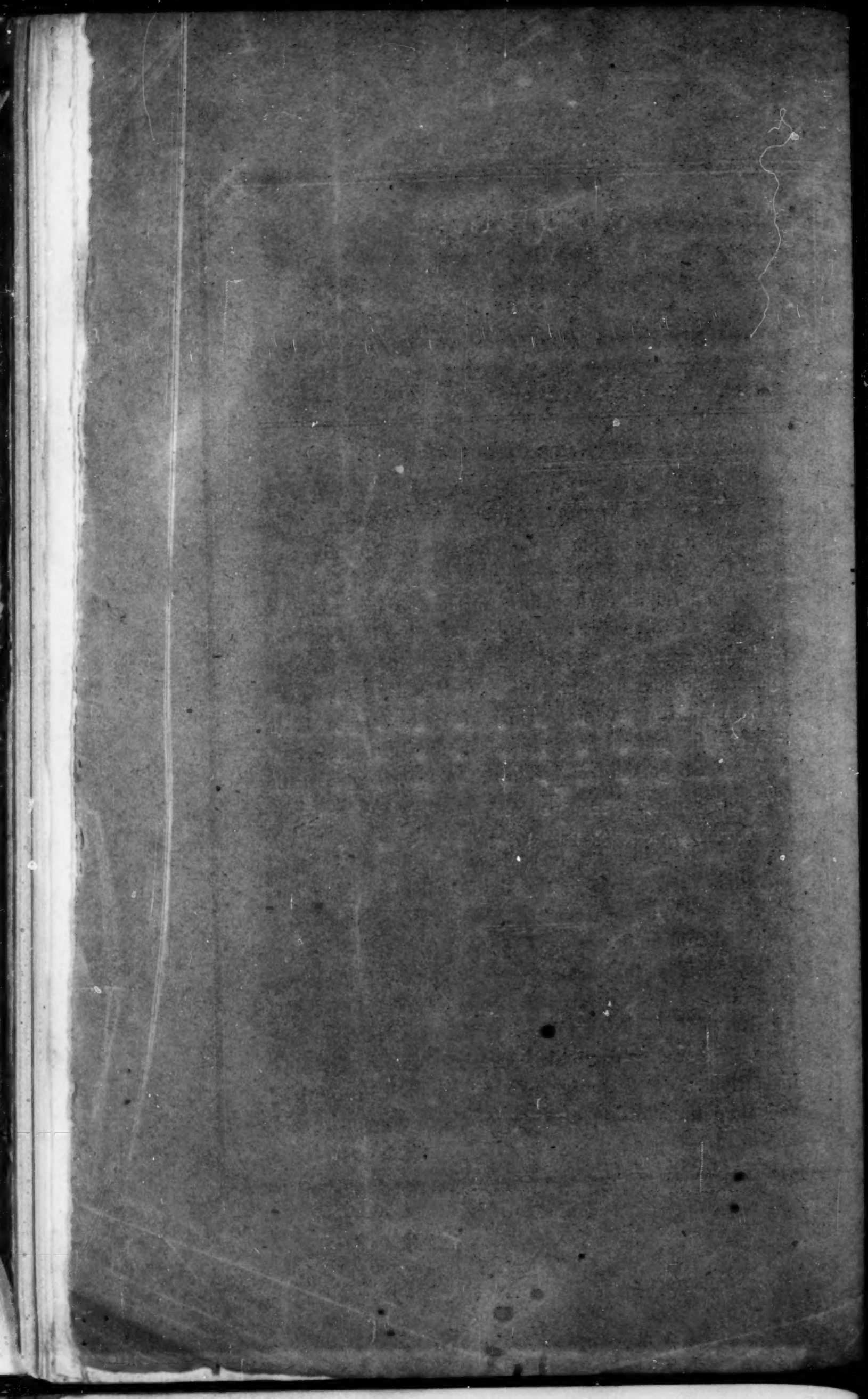
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[No. IV.

SULPHATE OF QUININE.

THE following speedy process for analysing the Cinchonas, is offered by M. TILLOY, pharmacien à Dijon. The object of it is to enable an apothecary to ascertain, in a short time, the probable proportion of the Quinine contained in a lot of bark before purchasing it. ELLIS & MORRIS, of this city, have operated on this plan, and found it to succeed. "Put an ounce of Cinchona reduced to coarse powder, into 12 ounces of alcohol, of $30^{\circ}=867$, and submit it to a temperature of 40 to 50—to 72 to 90 of F. for half an hour, and then decant the alcohol. Add a fresh portion, and repeat the infusion; mix the two liquids, and throw in a sufficient quantity of acetate or sub-acetate of lead to precipitate the colouring matter and kinic acid: leave it at rest for some time, and then filter. Add to the liquid some drops of sulphuric acid, to separate the lead from the acetate, which should be in excess, filter and distil. There remains, besides the acetate, or Sulphate of Quinine, according to the quantity of sulphuric acid employed, a greasy matter, which adheres to the vessel; decant and pour on it ammonia, which precipitates the Quinine instantly. Too much ammonia will retain it in solution, and then the addition of a few drops of sulphuric acid

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will cause it to precipitate. The Quinine washed with warm water, and treated with warm water acidulated with sulphuric acid and a little animal charcoal, (ivory black,) gives the sulphate very white. In this way, the author states, he has obtained 9 grains in six hours from an ounce of Cinchona, which is considerable, considering the loss occasioned by the charcoal, the filters, and that which remained in the mother waters. When the operation is conducted with care, and no Sulphate of Quinine obtained, it may be concluded that the bark is of bad quality. The kinic acid may be procured from the kinate of lead. E.

[*Journal de Pharmacie*, October, 1827.]

We subjoin the following as interesting matter to the trade, from the North American Medical and Surgical Journal, for October, pp. 434.

Consumption of the Sulphate of Quinia in France.
—MM. PELLETIER and CAVENTOU have applied to the French Academy, to be allowed to become applicants for the MONTHYON prize, in consideration of the medical improvements, which have grown out of their discovery of Quinia, and its sulphate. They state, that in consequence of their labours, the preparation of the Sulphate of Quinia has become a new branch of industry in France of the highest interest. To give an idea of the quantity of this sulphate, which is annually consumed, they laid before the academy a statement of the amount manufactured in two laboratories in Paris, one conducted by M. PELLETIER, and the other by M. LEVAILLANT. This document embraced the following particulars:

Cinchona bark, treated by M. Pelletier, on his own account,	270 quintals*
Do. by M. Pelletier, in conjunction with M. Delondre,	460
Do. by M. Levailant, for M. Delondre,	420
Do. by Levailant, for himself and various capitalists,	437
	<hr/>
	1587 quintals
	<hr/>
This quantity of Cinchona produced, of Sulphate of Quinia,	59,000 ounces
The other manufactories of France are estimated to furnish,	31,000
	<hr/>

Forming a total of 90,000 ounces.

Now, if we assume that thirty-six grains is about the average quantity taken by each patient who employs this medicine, then the ninety thousand ounces may be supposed to be divided amongst one million four hundred and forty-four thousand individuals.

MM. P. and C. add, that these details will not appear exaggerated, when it is considered, that the Sulphate of Quinia is employed over the whole of Europe, that it is exported to America, and that French and English commerce conveys it to the Levant and East Indies.—*Revue Medicale, May, 1827.*

M. HENRY, Jun. has written to the French Academy, for the purpose of requesting that his name also may be placed on the list of candidates for the prize, founded by M. DE MONTHYON for important medical discoveries. He alleges, in support of his claim, that the public is indebted to him for the process, by which the Sulphate of

* The quintal contains about 100 pounds.

Quinia is obtained very expeditiously, and in greater proportion, and more economically, than by the method of MM. PELLETIER and CAVENTOU.—*Archives Générales*, March, 1827.

Extracts from the Code Pharmaceutique or Pharmacopœia Gallica.

TINCTURES PREPARED WITH ALCOHOL OF 12 or 22° BAUME.

Tincture of Cinchona.

Take of Pale Cinchona Bark, in powder, 100
 Alcohol, (of 12 or 22 degrees,) 400

Digest for six days, strain and preserve for use.

In the same manner prepare tinctures of the red bark of Cinchona, wood of Guaiacum, (called eau de vie de Gayac;) of the Roots of Ipecacuanha, Valerian, Jalap, Elecampane, and Gentian; of the Bulbs of Squill and Colchicum, of the Leaves of Wormwood and Nux Vomica. It is necessary to observe great care in the preparation of the last article.

The proportion of the materials taken up by the alcohol will be found to be,

In the Tincture of Wormwood, as	1 to 20.4
of Pale Cinchona Bark,	1 to 25.47
of Guaiacum,	1 to 22.50
of Jalap,	1 to 43.40
of Ipecacuanha,	1 to 30
of Valerian,	1 to 28.34
of Gentian,	1 to 16.73

In the Tincture of Squill, 1 to 6.65
of Nux Vomica, 1 to 36.90

Each of these substances affords a stronger tincture with weak than with concentrated alcohol.

Tincture of Cantharides.

Take of Cantharides, coarsely powdered, 100
Alcohol, (of 12 or 22 degrees,) 800

Digest for 4 days, and filter for use.

The proportion of the material dissolved,
will be to the alcohol, as 1 to 55.86

Weak alcohol answers much better than the concentrated to make this tincture—that is to say, it separates much more completely the acrid matter of the Cantharides.

Tincture of the Extract of Opium.

Take of the Aqueous Extract of Opium, 30
Alcohol, (of 12 or 22 degrees,) 360

Place them in a glass vessel well closed, until the extract is dissolved; and then filter.

The extract will be to the alcohol in the
proportion of 1 to 12

It is necessary to observe, that in order to divide easily the doses of this medicine, that 24 drops are equal to 12 grains, or 0.6, and consequently contains one grain, or 0.5, of extract.

Tincture of Catechu.

Take of Extract of Catechu, 30

Of Alcohol, (12 or 22 degrees,) 120

Digest for 4 days, and filter for use.

The extract dissolved, is to the alcohol as 1 to 4

Camphorated Alcohol.

Take of Alcohol, (12 or 22 degrees,) 500

Camphor, 10

Mix, and after the camphor is dissolved, filter the liquor for use.

The camphor is to the Alcohol in the proportion of 1 to 50

The quantity of it may be augmented as much as is thought proper.

COMPOUND ALCOHOLIC TINCTURES.

Compound Tincture of Wormwood.

Take of Dried Leaves of great Wormwood, $\bar{3}$ ss. or 16

of small do. $\bar{3}$ ss. or 16

Cloves, $\bar{3}$ ss. or 16

White Sugar, $\bar{3}$ ij. or 8

Alcohol, (22 or 32 degrees,) lbss. or 250

Digest for five days, with a gentle heat, and filter.

The proportion of the medicines to the alcohol, will be as 1, to 5.2

Balsamic Tincture, commonly called Balsam of the Commander of Permes.

Take of Dried Roots of Angelica of

Bohemia, cut small, $\bar{3}\frac{1}{4}$ or 16

Dried flowers of St. John's-wort, $\bar{3}$ j. or 32

Of Alcohol, (22 or 32 degrees,)

℔2 $\frac{3}{4}$ or 1.128

Digest for 15 days with a gentle heat in a closed vessel, agitating it from time to time.

Filter, and add to the strained liquor,

Myrrh,

$\frac{3}{4}$ or 16

Olibanum,

$\frac{3}{4}$ or 16

Digest as the above, and then

Take of Styrax Calamita, or Balsam of

Peru,

3 or 96

Benzoin selected,

$\frac{3}{4}$ or 96

Socotrine Aloes,

$\frac{3}{4}$ or 16

Ambergris,

gr. 6 or 0.3

Triturate these substances, and put them in the foregoing tincture. Expose the whole for 40 days to the sun; filter and preserve in a well closed vessel.

The medicines will be to the alcohol very nearly in the proportion of one-fourth.

Aromatic Tincture, commonly called Eau de Bonferme.

Take of Nutmegs,

$\frac{3}{4}$ or 64

Cloves,

$\frac{3}{4}$ or 64

Canella,

$\frac{3}{4}$ or 64

Flowers of Pomegranate

$\frac{3}{4}$ or 80

Alcohol, (22 or 32 degrees,)

℔2 or 1000

Macerate for 15 days.

Filter by expression, and pour on the residuum,

Alcohol, (12 or 22 degrees,)

℔2 or 1000

Macerate then again for 15 days, and filter by expression.

Mix the two liquors together, and pass them through common paper.

The ingredients will be in proportion to the

Alcohol, as 1 to 7.3

Aromatic Tincture with Sulphuric Acid, commonly called Vitriolic Elixir of Mynsicht.

Take of Root of Calamus,	j or 32
Galangal,	3j or 32
Flowers of Chamomile,	3½ or 16
Leaves of Sage,	3½ or 16
Wormwood,	3½ or 16
Mint,	3½ or 16
Cloves,	33 or 12
Canella,	33 or 12
Cubebs,	33 or 12
Nutmegs,	33 or 12
Ginger,	33 or 12
Wood of Aloes,	3j or 4
Lemon Peel,	3j or 4
Sugar,	33 or 96

Reduce all these substances to a coarse powder and introduce them into a matrass.

Pour upon them,

Alcohol, (12 or 22 degrees,) lb½ or 250

At the end of 6 hours, add

Sulphuric Acid, 34 or 128

Then, at the end of twenty-four hours, add again,

Alcohol, (of 12 or 22 degrees,) lb½ or 750

Digest the whole for 4 days, then strain the liquor by expression, afterwards filter through paper for use.

The proportion of the Aromatic substances
 to the Alcohol, is a little below that of 1 to 5
 That of the Sulphuric Acid, is as 1 to 8
 And that of the Sugar, to the entire liquor,
 a little under 1 to 12

B. E.

[TO BE CONTINUED.]

*From the quarterly summary of the North American Medical
 and Surgical Journal, for October.*

CHLORIDE OF SODA.

As this substance ranks with chloride of lime, as a disinfecting agent, and has been lately employed both in France and England with encouraging success, as a remedy in hospital gangrene, phagedenic, syphilitic, and ill-conditioned ulcers, &c. it may be useful to give the formula of LABARRAQUE for its preparation. The French weights, for greater convenience, are converted into the nearest English weights.

Take of pure Carbonate of Soda,	5½ lbs.
distilled Water,	22 pints.

Mix, in a bottle of such capacity, as to be one-fourth empty. Then into a glass balloon bottle, (capacity about two quarts,) with a long neck and large mouth, put the following mixture :

Chloride of Sodium, (common salt,)	1½ lbs.
Peroxide of Manganese,	1 lb.

Into the mouth of the balloon bottle, lute two tubes:

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one large and curved, communicating with a bottle containing a small quantity of water, from which a similar tube must proceed to the bottle containing the carbonate of soda; the other, an S tube, intended to afford the means of adding the sulphuric acid conveniently. The quantity of acid necessary to disengage the chlorine from the above mixture is $1\frac{1}{4}$ lbs. diluted with about a pint of water.—*Medico-Chirurgical Review*, April, 1827.

The above process merely consists in passing a stream of chlorine through a solution of carbonate of soda, until the latter is saturated. It is, however, incorrect to suppose that a solution of chloride of soda only is formed. It is well known that, in this process, part of the chlorine is converted into chloric and muriatic acid, by the oxygen and hydrogen proceeding from decomposed water; and that these two acids, together with the remaining chlorine, combine severally with the alkali, so as to form, at the same time, chlorate, muriate, and chloride of soda. We may, therefore, consider the so called Chloride of Soda, as in reality a complex saline solution.

The above is the rationale usually given when explaining the nature of the liquid, formed by the action of chlorine on potassa, in the process for obtaining chlorate of potassa, and may be assumed as applicable to the case of soda. Nevertheless, Dr. GRANVILLE asserts, in a letter addressed to the Editor of the *Medico-Chirurgical Review*, and published in the April number of that journal, that he has recently ascertained by experiment, that LABARRAQUE's liquid does not contain *Chloride of Soda*, but is a mixture of 73.53 chloride of sodium, (muriate of soda,) and 26.47 chlorate of soda, in every 100

parts, with an excess of chlorine, equal to twice the bulk of the water employed.

Dr. GRANVILLE goes on to state, that the salts present are not the disinfecting agents; for upon being obtained in a dry state by evaporation, and redissolved in water, the remarkable properties of the liquid are lost. Hence it is evident, that the real disinfecting agent is the chlorine which it holds in solution; and simple water, containing the same proportion of chlorine, would have the same effect, though very inconvenient to the operator, on account of the escape of the gas.

Dr. G. considers LABARRAQUE's liquid as consisting of

1 Proportional, chlorate of soda, 108

5 chloride of sodium, 300

Dr. G. alleges that he has ascertained the *modus operandi* of chlorine on animal matter in a state of putrefaction, and that, during that action, new compounds are formed, which he has analyzed. He also remarks that the most economical process for obtaining the liquid of soda for disinfecting purposes, is to saturate with chlorine a solution of chloride of sodium, (common salt.) His views on these points will be given in detail in a memoir which he intends shortly to communicate to the Royal Society of London.

Extract from Magendie's Formulary. 5th ed. 1827. pp. 111.

PIPERINE.

THIS substance was discovered in pepper, (*piper nigrum*), (*Jour. de Phys.*, No. 2, 1820,) by M. ERSTÆDT, who regarded it as a vegetable alkali.

M. PELLETIER has since made an analysis of it, and has proved that Piperine, the crystalline matter of the pepper, is not a vegetable alkali; that it has much resemblance to resins, and is of a particular nature. (See Chemical Examinations of the Pepper, by M. PELLETIER, 8vo, Paris.)

This substance has just been employed in Italy as a febrifuge. I have not yet confirmed by my own experiments the properties which M. DOMINIQUE MELI has attributed to it, (Annali Univ. di Medicini, t. 27 and 28;) I shall, therefore, limit myself here to indicating the process which is used to obtain the Piperine, and the doses in which it may be employed, in order to induce new attempts with it.

Mode of preparation. Take 2 pounds of the grains of black pepper bruised, which must be digested at a low heat in 3 pounds of alcohol at 36° . It is then to be carried to ebullition, left to rest and cool, then decanted, and the operation repeated with other alcohol. The two liquors are mixed, and into this tincture is poured 2 pounds of distilled water and 3 ounces of hydrochloric acid. The liquor is disturbed, and a precipitate formed of a dark gray colour, which is formed, for the most part, of a fatty matter. This deposit being separated, there are collected on the filter and on the sides of the vase quite handsome crystals, which are nothing else but the Piperine. By adding water until the liquid is no longer troubled, a fresh quantity is obtained. This process is the same as that indicated by M. PELLETIER. In the memoir which we have cited, this chemist has also obtained the crystalline matter of pepper by the following method: After having exhausted the pepper

by alcohol, and evaporated the tincture, a fatty or resinous matter is obtained, which is submitted to the action of boiling water, which is renewed until the water is colourless; then this fatty matter, thus purified by washing, is dissolved in warm alcohol, and the solution abandoned to itself for several days: many crystals are obtained, which are purified by solutions in alcohol and ether, and by repeated crystallizations. The alcoholic mother waters, abandoned to themselves, may furnish more crystals. This crystalline matter is the Piperine.

The crystalline matter of the Piperine is presented under the form of prisms with four sides, of which two parallels are evidently the largest: the prisms are terminated by inclined faces. This substance is totally insoluble in cold water; boiling water dissolves a small quantity, which precipitates on cooling. It is very soluble in alcohol, less so in ether, more soluble in warm than cold.

M. PELLETIER found that Piperine had great analogy with the resin of pepper of cubebs, which M. VAUQUELIN compares to balsam of capaivi: the Piperine in the cubebs must have lost its crystalline properties.

Cases in which the Piperine may be administered. According to M. DOMINIQUE MELI, the Piperine possesses the same febrifuge properties as the alkalies of the bark. He has cured, at the hospital of Ravenna, a great number of fevers with this remedy; and he goes so far as to say that its action is more certain and more prompt than the sulphate of quinine. The Piperine must be used in a smaller dose than the sulphate of quinine. Intermittent fevers are the only diseases in which this remedy has been used. It might be used, also, in hemorrhagies, in the place of the cubebs pepper.

According to M. MELI, the acrid oil of pepper has the same febrifuge properties as the Piperine, but in a less degree. This is owing, no doubt, to that matter retaining a certain quantity of crystalline matter.

OPIUM.

WE extract the following information respecting the price and consumption of Opium in China, from a letter, addressed to a gentleman in this city, by his friend, residing in Canton, dated December, 1824.

From this document it appears that Opium is a contraband article, and prohibited from entering the "Celestial empire" through the regular channels of trade by severe edicts of government. Nevertheless, enormous quantities of it are smuggled; and consumed by the mandarins or nobles, and higher classes of society generally. The lowest estimate of the annual consumption, was, from 6 to 7000 chests, of a picul, or 133 pounds, each,—and one or two years before 1824, it amounted to 10,000 chests. Different qualities, having different prices, and taking their names from the countries which produce them, or ports whence they are exported, are known there. The price fluctuates constantly, from the supply being so uncertain. The kind denominated Patra was worth, at the time stated, above 1500; the Banares, 920; and the Smyrna, 850 dollars, per chest. Two years before, the first brought 2600, and the two others about 2200 dollars,—the highest price ever known. The lowest quotations were in 1796, when it sold for 180 to 200 dollars

per chest. From 3 to 4000 chests enter the ports of China from Bengal, where it is monopolized by the English East India Company. This company pays the natives 300 rupees per chest, for cultivating it. At the auction sales in Bengal, it brought in the early part of 1823, 5000, and at the same period of 1824, 2500 rupees per chest.

The annual cost of this drug to the Chinese, is estimated at 12,000,000 dollars, and that from, 1,500,000 to 2,000,000 people, are in the daily habit of consuming portions of it, by smoking it with tobacco.

The consumption of it nearly doubled in the short space of 8 years, from 1816 to 1824, notwithstanding the utmost vigilance of the government, and the severe decrees of his "Sacred Majesty."

The following facts respecting the commercial history of Opium, in Java and other parts of the east, taken from Crawford's Indian Archipelago, may be properly appended to the above account. Formerly the whole of the demand in these islands was supplied from Bengal; but since the opening of trade with the Americans, and the enlargement of British commerce in the east, a considerable proportion comes from Turkey and Malwa. The natural cost of a chest of Bengal Opium weighing about 140 lbs. is estimated at 112 sicca rupees, or £14 sterling. The government, which monopolizes the culture, limits the quantity grown to about 4500 chests, which are disposed of at the sales at Calcutta, which take place by auction in December and February, with the view of suiting the markets of China and Calcutta, where nearly the whole is consumed.

The price rose through successive years, from 1801 to

1817, from 738 to 2300 sicca rupees, its highest price. This price, exceeding more than twenty times its natural cost, showed the supply unequal to the demand, and consequently acted as a bounty on the article, and caused the importation of it, as above noticed, from Turkey and Malwa. It is made the subject of heavy duties throughout the Oriental islands. The native princes monopolize the sale, and the European government of Java farms the privilege of vending the drug *in a medicated or prepared* form. When the supply was regular, the cost to the consumer was about 3000 Spanish dollars per chest, an advance upon the market price of $133\frac{1}{3}$ per cent.; upon the monopoly price of Bengal, of $168\frac{1}{2}$ per cent.; and upon the first cost, of 3025 per cent. These duties, if judiciously managed, it is believed, would yield a nett revenue to the government of about 1,000,000 of Spanish dollars.

When Bengal furnished the whole supply to the islands, the average amount was 900 chests annually, of which Java alone consumed 550. The consumption, however, fluctuates with the price. When the English took possession of Java, the retail price was \$5000 per chest, and the annual quantity consumed only 30 chests. When the price fell to about \$4000, the sales increased to 50 chests; and when it only brought \$3500, the consumption advanced to near 100 chests.

The number of consumers increased and diminished with these variations in price: when it was low, many partook of it who never used it before; and when it increased in value, those who had acquired the habit desisted altogether, and substituted some other narcotic less agreeable and more pernicious.

On its introduction, the Turkey Opium met with the opposition, arising from prejudice, which all new things must encounter. The Chinese, who are the farmers of the Opium excise, could scarcely be induced to take a few chests in 1815. In their contracts with merchants shortly afterwards, they consented to take one-fourth Turkey Opium. In 1817, they expressly stipulated for it to the amount of one-half they required, although the price had doubled, and Bengal Opium remained stationary. In 1818, they demanded that three-fourths should be of the Turkey article, and the price approximated to the Bengal drug, which considerably diminished in value.

Bengal Opium, which had for many years brought in China from 12 to 1500 dollars per chest, fell in 1818 to 800. Having said so much respecting the commercial history of this narcotic, and alluded to the fascination which it exercises over the Oriental islanders and nations, an account of their method of preparing and using it, may not be uninteresting. It is universally smoked by the tribes of these islands, and other people of Asia. The case is exactly reversed with respect to it and tobacco. The following description is copied from *Marsden's Sumatra*. "The raw Opium is first boiled or seethed in a copper vessel, then strained through a cloth to free it from impurities; and then a second time boiled. The leaf of the *tambacu*, (tobacco,) shred fine, is mixed with it, in a quantity sufficient to absorb the whole; and it is afterwards made up into small pills, about the size of a pea, for smoking. One of these being put into the small tube that projects from the side of the Opium pipe, the tube is applied to a lamp,

and the pill being lighted, is consumed at one whiff or inflation of the lungs, attended with a whistling noise. The smoke is never emitted by the mouth, but usually receives vent through the nostrils, and sometimes, by *adepts, through the passage of the ears and eyes.* This preparation of the Opium is called *maadat*, and is often adulterated in the process, by mixing Jaggri or pine sugar with it; as is the raw Opium, by incorporating with it the fruit of the pisany or plantain." B. E.

Reports of the Medical Society of the city of New York, on Nostrums, or Secret Medicines.

Published by order of the Society, under the direction of the Committee on Quack Remedies.

WE conceive we shall be gratifying the curiosity, as well as imparting useful information to the apothecaries of our city, and other parts of the union, by furnishing them with a concise view of the labours of the medical society above mentioned, as set forth in their reports on the popular nostrums of the day.

It will not be denied that the medical profession has had sufficient aggravation, for the last ten years, in this country, to excite its indignation, and rouse it to exertion. Pharmacy and medicine are so intimately interwoven, and essentially dependent upon each other, that the one cannot receive an injury without the other participating to a greater or lesser extent in its effects. It will be seen by these reports, that to deceive the multitude, and practice upon their credulity and ignorance, at

the expense of their purses, and too frequently of their health, and even lives, constitutes the great art of the empiric, and the main source of his wealth: for his remedies, when most successful, are made up of the very fruits of philosophy, contrived by the skill and sanctioned by the experience of our predecessors.

The Medical Society of the city of New York merits the thanks of the community, for having stripped quackery of some of its mystery and borrowed plumes, and exposed, in naked deformity, its shallow and wicked foundation.

The first report of the committee embraces an inquiry into the composition, effects, and mode of operation, of CHAMBERS' remedy for Intemperance. They present the following analysis of this nostrum, made by Mr. G. CHILTON, chemist, at their request.

“Having procured a parcel of the remedy from Mr. CHAMBERS, which weighed 225 grains, it was divided into portions of 25 grains each, for the purpose of making separate trials, previous to a more complete investigation. The powder contained in the parcel, the general colour of which is gray, is evidently a mixture of differently coloured particles, by no means uniform in their size. The first step in the examination, was to pass it through a sieve of bolting cloth, in order to separate the coarse part from the fine. In the coarse part left upon the sieve, could be easily distinguished parts of cochineal grains, masses of black matter, like lampblack, with red and brown parts of skins or pods, having the pungent taste of pepper, and affecting the nostrils like Cayenne. The fine part which had passed the sieve, was boiled with one ounce of water in a Florence flask, and filtered;

the solution, which resembled an infusion of cochineal, passed with difficulty through the filtering paper: the residuum, after washing with another ounce of water, and dried, was a powder consisting of black and yellow particles, *sulphur in powder mixed with carbon*. The solution, which exhaled the odour of tea, had very slightly the odour of sulphur also. Various re-agents, such as vegetable infusions and tinctures, metallic salts, &c. threw down precipitates from this solution. Muriate of barytes, nitrate of silver, and oxalate of ammonia, had comparatively little effect; from which we may infer, that neither sulphates, muriates, nor lime, in notable quantities, were present. Among the effects produced by re-agents on the solution, the precipitates afforded by acetate of lead and hydro-sulphuret of ammonia were the most interesting, as they correspond with the presence of *tartar emetic*. The precipitate thrown down by acetate of lead, was dissolved by dilute nitric acid. The precipitate by hydro-sulphuret of ammonia, was orange red, which might arise from arsenic as well as from antimony. The following experiment was made to determine this point. To a fresh portion of the solution, carbonate of potass was added, and then sulphate of copper, the carbonate of copper precipitated was intensely *blue*; had the orange precipitate owed its colour to arsenic, the precipitate would have been green. As a further confirmation, a few drops of a watery solution of white oxide of arsenic were added, which converted the precipitate, with its supernatant fluid, to a lively grass green.

“As these experiments seemed to demonstrate the presence of tartrate of potass and antimony, the next step in the examination was, to obtain it in an insulated state.

For this purpose, 50 grains of the remedial powder were boiled in two ounces of water; the filtered solution was evaporated to dryness; on re-dissolving the dry mass, a portion of it was left; by slowly evaporating this second solution, a crystalline mass was deposited, mixed with colouring matter. By repeating the crystallizations, which were much impeded by the presence of gummy matter, perfectly well formed tetrahedral and octahedral crystals of emetic tartar were obtained; these crystals weighed six grains; but as they were obtained by frequent crystallizations, they were probably not more than one half of the tartar emetic contained in the 50 grains. If we allow this supposition to be correct, the whole parcel of remedy, weighing 225 grains, must have contained a drachm of this very active ingredient. The residuum from the 50 grains of the last experiment, which weighed 13 grains, was digested in alcohol, sp. gr. .825, which took up $2\frac{1}{2}$, and left $10\frac{1}{2}$ grains. This alcoholic solution left, by evaporation, a red resinous extract, extremely pungent and hot: by adding water to this alcoholic solution, a milkiness was produced by the precipitation of the resin. The $10\frac{1}{2}$ grains which the alcohol refused to take up, in the last experiment, were treated with muriatic acid, which dissolved out six grains, and left $4\frac{1}{2}$ grains; by adding potass to this solution, a purple powder fell down, which weighed two grains. The $4\frac{1}{2}$ grains left by the muriatic acid in the last experiment, were exposed in a crucible to a red heat; sulphur burned off with its characteristic blue flame and suffocating odour, and three-fourths of a grain of silex was left.

“It is evident from these experiments, that the constituents of CHAMBERS’ remedy are the following, viz.

Emetic tartar—capsicum—sulphur—carbon—cochineal, and gum. The silex probably belongs to the pod of the capsicum. The gummy ingredient is probably gum arabic, and was somewhat embarrassing, as it impeded the passage of the solutions through the filter, and affected the crystallizations. The sulphur is seen floating on the surfaces of the solutions, and appears as a yellow powder in the residuums, mixed with carbonaceous matter.

“On a second trial with another parcel of the medicine, fifty-four grains of tartar emetic, in its crystallized form, was procured, and the mother waters still held considerable in solution, which, on account of the gum entering into its composition, could not be conveniently separated.”

From this analysis, it appears that tartar emetic is the active ingredient in the compound. This is evident from its producing emetic and cathartic effects, and raising pustular eruptions on the skin when applied; which happened in the case of the person employed to powder it, who, ignorant of the articles, said, “it was strong stuff,” as it caused the backs of his hands and arms, which were bare, to break out in painful pustules. The committee believe the quantity of powder put to each half pint of the “patient’s favourite drink,” contains 4 4-5 grains of tartar emetic; each wine-glass full, 1 1-5 grains; and the fasting dose rather more than 3½ grains. A quantity sufficient, under ordinary circumstances, to produce not only distressing nausea, but full vomiting. An examination into the pretensions of this compound follows, prefaced by a single quotation from Mr. CHAMBERS’ circular, viz. “I am very positive a free use of

the mixture will not injure the constitution: also positive it will cure, if sufficient be taken." The language of empiricism must be dogmatical, for the mass of men are convinced by round assertions, and not by arguments. They draw a frightful picture of the moral, intellectual, and physical ruin which follows habitual intemperance; and clearly show, that though temporary benefit has been derived by individuals, from various remedies, none has yet been discovered which will certainly destroy the love for the intoxicating draught. Tartar emetic was employed by RUSH and DARWIN, more than 50 years ago; the latter gentleman used it with the view to its producing disgust, the former as a remedy in delirium tremens. The same powerful drug formed the basis of a remedy for intemperance, sold by a Mr. L'OISEAU, in New Orleans, and which acquired a temporary reputation, and was purchased by several planters, for the purpose of curing this habit in their slaves. The effects, however, were found to be so uncertain generally, and so violent and dangerous occasionally, that the proprietor, from prudential motives, was induced to change his residence.

Bitters, tonics, aromatics, and the mineral acids, have all been employed in conjunction, or alone, with no more permanent success. The combination of bitters and elixir vitriol was the famous German remedy to answer this intention.

Notwithstanding the occasional benefit which has resulted from the use of this and similar articles, in drunkenness, (which act, by producing an irritation in the stomach, that, while it lasts, suspends the inclination for a fluid, which answers the same purpose,) they can-

not except it from the black catalogue of nostrums so justly obnoxious to censure and reprobation.

Such complicated derangements of the system arise from long continued drunkenness, which full and frequent vomiting may either increase, or precipitate the patient on death, that we believe an apothecary, when made acquainted with the composition of CHAMBERS' remedy, would feel as reluctant to expose it to indiscriminate sale, as he would so much pure tartar emetic on his own responsibility.

The second report of the committee is on LEROY'S *Médecine Curative*.

This drastic nostrum has been used in France, the French colonies, and among the French population in our northern and southern cities. It enjoyed at one time great celebrity in France, until a few victims were sacrificed to its indiscriminate use, and the constituted authorities were called upon to interfere and enforce the law against secret remedies; it then began to be suspected, and lose the popular favour. In order to screen himself from the law above noticed, "LEROY was obliged to take a higher ground than the exclusive possession of a medicinal article." "He pretends to lay open to the public gaze the whole arcana of medicine," and adopts the maxim, "one disease and one remedy" — "a principle of corruptibility predominating in the fluids, the sole cause of disease,—its evacuation through the *prima viæ* the only cure." His remedy, which he

prescribes on all occasions, and for all diseases, and which he says, in some obstinate cases, requires to be repeated sixty or one hundred times, he graduates into four degrees, differing from each other only in the relative quantity of the ingredients. The first degree he gives to children, and very debilitated subjects, and is one-fourth weaker than the second degree, with which he commences the treatment of ordinary adults. The third is one-third stronger than the second degree, and is given when the other fails; the fourth degree is twice the strength of the second, and is, in like manner, resorted to when the third proves ineffectual. The following is his recipe for the second degree, the ordinary preparation for adults.

R. Pulv. Res. Scammon, ʒij

Pulv. Rad. Convoli. Turpeth. ʒj

Jalap, ʒviij

Alcohol dilut. ℥xij

Infuse for 12 hours in a heat of 76°, strain, and add to the tincture the following syrup.

R. Senna Opt. ʒviij

Aq. bullient. ℥ij

Infuse for 5 hours, express, and add to the liquor,

Sacchar. Alb. ℥ijss

And boil to a syrup.

LEROY directs this medicine to be commenced in dose of two table spoonsful, and increased, if necessary, to four, which, if not sufficient, must be succeeded by the third, commencing with the same dose as in the preceding, and in like manner increased to the same quantity; when, if it does not produce the desired effect, it must give place to the fourth degree, in doses of four table

spoonsful, and increased if necessary; which degree will always be found quite sufficient for any case. A free use of diluent drinks is allowed during the operation of the purgative, and all other remedies withheld, except occasional blisters. This preparation is used in all diseases located, as he chooses to say, below the pyloric orifice of the stomach. The articles are all well known, except the turbith root, an antiquated remedy, and a species of jalap. It has been superseded by the jalap of the shops, and generally esteemed inferior to it as a cathartic; though by others its powers are rated as more active than the officinal drug.

For those diseases which are situated above the orifice of the stomach, in his nosology, he gives the following preparation, styled his vomit-purgative.

R. Fol. Sen. opt. ʒiv

Vin. Hispan. lbiv

Infuse for three days, frequently shaking the mixture, and obtain the tincture from the senna leaves by strong expression.

To each pound of the wine add ʒj of tartarized antimony, and filter for use.

“The dose for an ordinary adult is a table spoonful; to a child seven years old half the quantity, to be repeated in an hour and three quarters, and then every hour and a half till the proper effect be produced. His rule is to produce seven or eight full emetic and cathartic operations, but he has no objection to its going beyond this point.” He commences the treatment of all his suprapyloric diseases with this compound, and finishes them off by active and violent purging, continued until the disease vanishes or the patient sinks. The latter event,

according to the testimony of Dr. ARNOUT, late of Metz, and other French physicians, has not unfrequently taken place.

The consequences of its indiscriminate use became so alarming, as to induce the French government to call the attention of the Royal Academy of Medicine of Paris to the subject. "By analysis of portions of the vomipurgative prepared by LEROY himself, they found that a given quantity, asserted by him to contain $1\frac{1}{8}$ grains, contained $3\frac{1}{2}$ grains of tartarized antimony; and also that a given portion of the purgative contained 3ijss of a resinous material, which he asserted to contain only 38 grains."

In conclusion, the committee were acquainted with two cases in New York, which required the interference of medical men to save the lives of the patients. One of these was great exhaustion from violent and long continued purging. In the other, the remedy appeared to act as an acrid and dangerous poison, from the effects of which the man was with difficulty saved.

The third report of the committee contains a brief history of SWAIM'S Panacea, and its kindred "*depurative syrups*," with an investigation into their composition, remedial powers, and *modus operandi*.

The basis of these syrups, of which we now have such a multitude, each claiming superiority over the other, is "a concentrated decoction of sarsaparilla, mixed with other articles, of little or no efficacy, to give them flavour, and to disguise their true character. The introduction into medicine of this form of preparing the sarsaparilla, is

probably coeval with that of the article itself, in 1530. The formulæ are to be found in most of the ancient French works on pharmacy. The following is taken from the Code Pharmaceutique.

R. Rad. Sarsap. ℥ij

Aqua tepid. oxij

Infuse for 24 hours: afterwards boil for 15 minutes, express, and to the residuum add

Aqua, ox

Boil to ovj, repeat twice or thrice, then mix all the liquors, and boil gently with

Flor. Borag. off.

Flor. Rosar. Alb.

Fol. Sennæ.

Sem. Anis. aa ʒij

Reduce to one-half, strain, and add

Mel. Com.

Sacchar. Alb. aa ℥ij

And boil to the consistence of a syrup.

It is stated in the index that this differs little from the other celebrated anti-syphilitic syrups, either in its nature or proportions. Charlatans have always been in the habit of making immaterial alterations, more effectually to disguise their nostrums and prevent detection.

“The ordinary dose of the above compound is one or two ounces, twice a day, with or without a grain of corrosive sublimate to each pound. The patient, at the same time, taking freely, throughout the day, of sarsaparilla ptisan. Besides this syrup, a number of others have, at different periods, enjoyed in France a reputation more or less temporary. The most important of these was the *Rob de Laffecteur*, which has been extensively employed

throughout France and her colonies. This was invented by BOIVEAU, a well instructed French apothecary, who induced, for the sake of bringing it into notice, LAFFEC-TEUR to allow it the sanction of his name. It was always maintained by the inventor, that no mercurial salt was contained in his syrup; and the analysis of the chemists to whom he submitted it, confirmed his assertion; they said the compound would decompose corrosive sublimate."

This preparation, too expensive for general use here, was employed in 1811 by some New York physicians, in a desperate case, with success. Dr. M'NEVIN, who was engaged in the consultation on this case, afterwards gave publicity to the formula for its preparation, derived from M. ALLION, a French chemist.

Among the first who experienced its benefits was Mr. SWAIM, a book-binder, in his own person. He was furnished with the recipe by Dr. A. L. QUACKINBOSS, who administered it to him; and immediately began his career with it under the title of *Swaim's Panacea*, for the cure of those diseases, for which the rob had been used and celebrated so many years ago. He adhered closely to the form and directions of Dr. M'NEVIN, at first, and insisted on the use of the sarsaparilla ptisan, as some of us know who were in the habit of selling him this root at that time. It is believed he has now substituted the *pyrola umbellata* (pipsisewa) for the sassafras, guaiacum, or marsh reed grass. The odour of the oil of wintergreen is also very perceptible. Nor does he at present employ the ptisan, as formerly. The medicine may very probably be improved by these changes, made more palatable, and less liable to nauseate; but the great

object of these alterations is with all charlatans the same—to disguise more effectually the principal ingredients of their nostrums.

“The following is M. ALLION’s recipe for the preparation of LAFFECTEUR’s rob, which is generally believed in France to be the correct formula.”

R. Rad Sarsap.

Arund. phragmit. <i>aa</i>	℥xxx
Flor. Borag. off.	℥viiij
Fol. Senna,	
Flor. Rosar. <i>aa</i>	℥ij
Sacchar.	
Mel. opt. <i>aa</i>	℔6

Boil the sarsaparilla and marsh reed-grass in 9 pints of water for 1 hour; strain off the decoction, and pour the same quantity of water on the residuum, which is to be boiled for 2 hours: towards the end of the boiling add the borage flowers, senna, and rose leaves, and then strain off, and to both decoctions add the sugar and honey, and boil the whole to the consistence of a syrup.

The dose for men is 6 table spoonsful, and for women 4, taken, without addition, at six in the morning,—and two hours afterwards to commence drinking the sarsaparilla ptisan in tumblerfuls, and take 7 of these before dinner.

The sarsaparilla ptisan, is made by boiling 2 oz. of the roots, in three quarts of water, to two quarts, letting it infuse during the night, and straining it off in the morning. In summer, and for women, ℥iss. of the sarsaparilla will be sufficient. The ptisan is to be drunk warm in winter, and cool in summer, and to constitute the patient’s sole drink. It would be foreign to our purpose to say

any thing of the sketch given in the reports of the medical properties, or *modus operandi*, of this syrup. To make our paper more complete, we have translated the following formula for the "*Sirop or rob antesyphilitique de L'affecteur, (usitée à Naples uselon le docteur Savaresi.)*"

R. Sarsaparilla	℔bix
Guaiac.	
China Root,	
Sassafras, aa	℔vj
Yellow Cinchona,	℔iiij
Flowers of Borage,	℔iiss
Aniseed,	ʒiv
Molasses, clarified with the white of	
eggs,	℔xxx

First, make a decoction of the bruised sarsaparilla; then add the China root, and guaiacum. The cinchona and sassafras shaved, are not to be added till towards the end of the boiling. Finally, introduce the borage flowers and the aniseed, when the clarified molasses is put into the infusion to finish off the syrup. The dose is the same as in the *sirop de Cuisinier* given above, and it is used in the same affections.—[*Virey's Pharmacy.*]

It would be to the interest of apothecaries generally, to keep one or both of these syrups as officinal preparations. By putting them at a reasonable price, and advertising them occasionally, physicians would know where to find them, and they would become more generally used by the regular practitioner.

B. E.

NOTE.

WE omitted to mention, in our number for September, that the two articles on the preparations of Opium, by Professor HARE, were, with the consent of the author, taken from the Philadelphia Medical and Physical Journal, for May or June, we are uncertain which. The omission was *entirely accidental*. E.

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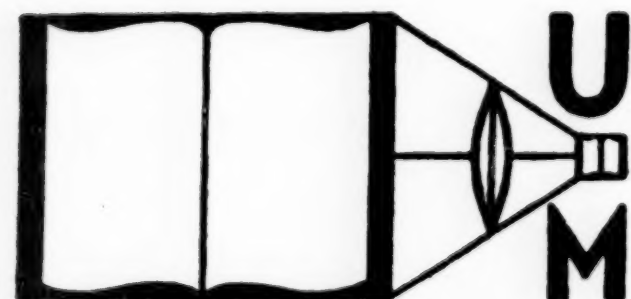
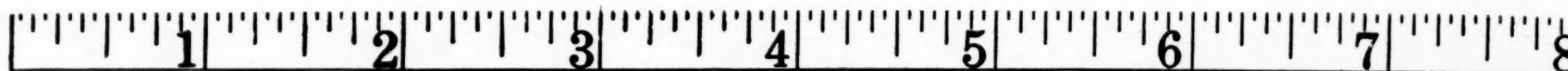
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